hup, Abies sachalinensis[33]. In the second phase the scene of hunting shifted accordingly from the fields up to the hills. Huntings on the fields were usually done by hunters out from their homes in the settlement for the day, whereas for the hill hunting the hunters from most settlements migrated in parties to near the area where deer concentrated to pass the winter (Fig. 8 and Map 2). The hunters stayed at their huts in the valleys of streams down from the winter quarters, chasing their game with hounds and with hand bows and poisoned arrows. They usually returned home when the snow was too deep for them and their dogs to walk in. In either of Tokapchi and Otopuke, hunting activities during this second phase were performed only by part of the hunters, and in Nitmap on the upper Tokapchi at least, by some younger, unmarried hunters. In short, those activities were more or less supplementary to field hunting. They seem to have fluctuated in proportion to the scarcity of meat in actual store.

Spring hunting.—In spring the surface of the snow on the hills thawed by day and hardened again by night. Then deer hunting was resumed by hunters back at their huts near the winter quarters (p. 54). For some time early in the season, they used their hounds to drive the animals from their quarters down into glens still filled with snow and then shot them with hand bows as they fled struggling in the hardened snow. They also hunted the game lured by fresh leaves or small twigs of trees fallen on the ground, with spring bows set around them. As the snow began to disappear and the plants pushed forth their buds, deer gradually came down in herds to the lower plain in search of food. From the winter quarters down to the fields deer passed by way of the ridges of hills. Their tracks, *yuk apiri*, were much more fixed between the winter quarter and the bottom of the ridge than on the open fields. They continued hunting by means of spring bows set along the migration tracks as well as by hand bows till the base snow disappeared from the fields and the downward migration was completed. Each hunting party constituting a hut group (pp. 43-46) practised the spring bow hunting in their own hunting territory, that is, the dale valley in which their hut was located (p. 31).

Besides the methods mentioned above, the Ainu hunted deer down with dogs, caught them by the horn or neck with ropes and killed them with clubs as they fled struggling in the snow or crossed the rivers[34]. This method was widely practised among the Ainu; however, it seems to have been only supplementary to the others. It was also the only method of deer hunting by women and children.

Bear Hunting.

The Hokkaido species of bear belongs to Ursus arctos, a kind of brown

1, [Errata: the word "scence" should read "scene". Cf. errata sheet, p. 164-A--Analyst]

11: Watanabe E-4,5 (1951-1959) 1964 AB6 Ainu AB6

There could not be any cooperative gathering work of the local group as a whole except when it consisted of a very few families and formed a single *kotan*. In the Otopuke valley the local group split themselves into several *kotan*, the upstream one with 10 families into 6 *kotan*, the downstream one with 8 families into 4 *kotan*, each of which was a single cooperative unit consisting of 1-3 families. In the Tokapchi valley the *kotan* were larger on an average than those in the Otopuke valley in terms of the number of member families; of the two *kotan* analysed, Nitmap with 7 households and Pipaushi with 6 households, had been divided into several cooperative units. This was also the case with the single-settlement local group with ca. 10 households in Tonika of the Azuma valley in the 1880's. For example, Nitmap group, a single-settlement local group with 7 households, was divided into 4 units in either of cooperative deer hunting or bear hunting and into 3-4 units in various kinds of cooperative fishing activities. Here attention must be drawn to the fact that the membership of the cooperative group might have been almost the same in the same type of cooperative work but varied to some extent in the different types of work. Factors responsible for the formation or fission of the cooperative group could not be analysed though some of them might be vaguely suggested in a few actual cases in Notes 41 and 42.

So far as gathering activities are concerned, no cooperative unit consisting of the members of more than one settlement has been known among the Ainu, though there were rare cases as, for instance, of an individual joining a cooperative group outside his settlement to which his relative belonged, to take part in such single work as bear hunting or bag-net fishing. One of the actual examples is given in Note 42. In other activities than gathering, cooperation on the largest scale was made in the setting up of the roof of a house in house-building, which required a number of hands at one time. But even in this work, cooperation remained within one local group (p. 12).

In hunting, men played the leading part doing decisive work. It is true that women occasionally hunted deer with a rope or club, helped by hunting dogs, but it was a taboo for Ainu women to use bow and arrow which constituted the major weapon of the people. In spring and autumn, men of each cooperative hunting group were divided into two parties, the bear hunting party consisting of younger and more active hunters and the deer hunting party of older and less able men. The autumn bear-party was generally smaller in size than the spring one, for in that season deer hunting and dog salmon fishing were of special importance for securing winter foods. It is to be noted that at times even the deer party hunted bears if they found any, but their hunting fields were more suited to deer hunts, bears living more sparsely there Fig. 8. And even the party that had gone after bears, if